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REMARKS

The final Office Action dated 14 April 2003 has been reviewed and the comments of the U.S. Patent Office have been considered. Claims 1, 4, 14 and 16 are cancelled without prejudice or disclaimer, claims 3, 19, 25 and 26 are currently amended, and claims 2, 5, 6, 13, 15 and 17 were previously amended, claims 7-12, 18, 20-24 and 27 remain as originally filed. In particular, claim 3 has been merely reorganized to ensure that each feature has a proper antecedent basis and, it is respectfully submitted, without any change to the scope of the claim. And claims 19, 25 and 26 have been merely rewritten in independent form in accordance with the Examiner's helpful suggestion to make claims 19-21 and 25-27 allowable. Thus, claims 2, 3, 5-13, 15 and 17-27 are respectfully submitted for reconsideration by the Examiner.

Applicants again respectfully request that the Examiner acknowledge the claim for domestic priority under 35 U.S.C. § 119 (e) to provisional Application No. 60/225,860.

As to the illustration of the subject matter of claim 12, it is respectfully submitted that this feature is shown. Moreover, it is respectfully submitted that, in accordance with 37 C.F.R. § 1.81(a) no additional showing is necessary for the understanding of the subject matter that is sought to be patented.

Claims 2, 3, 5-10, 12, 13, 15, 17 and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,474,048 to Yamazaki et al. (Yamazaki). Claims 5-10, 12, 13, 15, 17, 18 and 22-24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,584,278 to Satoh et al. (Satoh). Claims 5-7, 9, 12, 13 and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,164,312 to Bostedo et al. (Bostedo). And claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamazaki or Satoh. These rejections are respectfully traversed in view of the following comments.

Independent claim 3 recites a combination of features including a "first port being in fuel vapor communication with the fuel vapor collection canister," "a fuel tank being in fuel vapor communication with the second port of the isolation valve," and "a first sub-chamber extending from the first port to the aperture and being defined by the interior partition, the central portion of the diaphragm, and the first section of the housing; a second sub-chamber extending from the aperture to the second port and being defined by the interior partition, the intermediate portion of the diaphragm, and the second segment of the second section of the housing; and a third sub-

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chamber being defined by the first segment of the second section of the housing and the central and intermediate portions of the diaphragm." Similarly, independent claim 17 recites a combination of features including "a first port adapted to be connected in fluid communication with a fuel vapor collection canister, a second port adapted to be connected in fluid communication with a fuel tank" and "a first sub-chamber, a second sub-chamber, and a third sub-chamber, the first sub-chamber extending from the first port to the aperture and being defined by the interior partition, the diaphragm, and the first section of the housing, the second sub-chamber extending from the aperture to the second port and being defined by the interior partition, the diaphragm, and the second segment of the second section of the housing, and the third sub chamber enclosing the resilient element and being defined by the diaphragm and the first segment of the second section of the housing." And independent claim 22 recites a combination of features including "a first port being adapted for fuel vapor communication with the evaporative emission space of the fuel tank and including a second port being adapted for fuel vapor communication with the fuel vapor collection canister," "moving the diaphragm to the first configuration in response to a second pressure level at the second port, the second pressure level being below atmospheric pressure," and "moving the diaphragm to the second configuration in response to a first pressure level at the first port, the first pressure level being above atmospheric pressure."

Support for these features may be found at, for example, paragraphs 0020-0023 and Figures 2 and 3 of Applicants' specification as originally filed. No new matter has been added. In particular, Applicants' outlet section 130 is connected for fluid communication, via outlet port 122c, with fuel vapor collection canister 12, and Applicants' inlet section 140 is connected for fluid communication, via inlet port 122t, with fuel tank 16. Consequently, a central portion 162 of Applicants' diaphragm 160 occludes the aperture 126 so as prevent fluid flow between the inlet and outlet ports 122t, 122c, which is enhanced by a pressure level below atmospheric pressure at the outlet port 122c (Applicants' paragraph 0028). Then, diaphragm 160 is moved to the second configuration in response to a first pressure level above atmospheric pressure at the inlet port 122t acting on an intermediate portion 162 of Applicants' diaphragm 160 (Applicants' paragraph 0028).

According to the Office Action, Yamazaki's "first sub-chamber is the tube extending up from the canister." This is consistent with Yamazaki's Figure 2, which shows the diaphragm valve 7 as having a chamber that extends from a canister 14 to an end of the passage 12 associated with the valve element 9, and that chamber is defined solely by the passage 12 and valve element 9, i.e., independent of any portion of the housing for the diaphragm valve 7. Thus, it is respectfully submitted that Yamazaki's diaphragm valve 7 fails to teach or suggest the features of Applicants' isolation valve, and that the Office Action specifically acknowledges this distinction.

Further, Yamazaki shows a chamber 7a that communicates via a passage 6 with the pressure intake port section 5 of the fuel filler tube 2, i.e., as opposed to communicating with the ambient environment (described at Applicants' paragraph 0027).

Satoh's system, like that of Yamazaki, shows a first diaphragm 74 (in addition to a second diaphragm 104) dividing a first chamber 76 and a second chamber 78. The second chamber 78 communicates via conduit 38 with the inlet portion 16 of the fuel filler tube 14 (Satoh column 6, lines 38-40), i.e., as opposed to being vented as asserted in the Office Action. Moreover, in direct contrast to Applicants' invention, Satoh's Figures 1 and 3 show a vent outlet opening 96 connected at its lower portion with an upstream vent passageway 98 extending radially outwardly to communicate, via the vent inlet port 93 and the vent tube 44, with tank body 12 (Satoh column 7, lines 19-23). Thus, Satoh shows the reverse structural arrangement with respect to Applicants' invention.

Bostedo shows "a valve for purging contaminant liquids from a railway vehicle brake air line which is subject to pressure variations" (column 1, lines 15-17). In particular, Bostedo states that when the brakes of a locomotive are applied, the pressure in the independent brake line increases rapidly and valve 10 opens and during a brief time, air and any contaminant liquids are purged through exhaust 34 (column 5, lines 10-16). Bostedo states that valve 10 has a low impedance discharge flow path 42 and a high impedance control flow path 50, both of which are connected to a conduit 50 (Bostedo Figures 4 and 7) from which liquid is to be purged (column 4, lines 43-46). Thus, Bostedo shows that annular chamber 40 and control chamber 32 are commonly connected to conduit 50, which is in stark contrast to Applicants' invention.

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The Office Action asserts that "recitations 'adapted to be connected to' various fuel components is seen as suggested use only." However, this assertion is contradictory to MPEP § 2173.05(g), which states with respect to *In re Venezia*, 189 USPQ 149 (CCPA 1976), that "the Court held that limitations such as 'members adapted to be positioned' ... serve to precisely define present structural attributes of interrelated component parts of the claimed assembly."

Thus, for at least these reasons, it is respectfully submitted that neither Satoh, nor Yamazaki, nor Bostedo, whether considered individually or in combination, teach or suggest the claimed invention as a whole, and it is respectfully requested that independent claims 3, 17 and 22 are allowable. Thus, allowance of these independent claims is respectfully requested.

With regard to claim 11, regardless of whether it would have been obvious to make the diaphragm of Yamazaki or Satoh out of materials impermeable to hydrocarbons "as a matter of ordinary design," as asserted in the Office Action, there is still no teaching or suggestion to overcome the aforementioned common deficiencies of Yamazaki and Satoh. As such, it is respectfully submitted that the rejection should be withdrawn.

Claims 2, 5-13, 15, 18-21 and 23-27 ultimately depend from one of allowable claims 3, 17 and 22, and are also respectfully submitted to be allowable for at least the same reasons as the independent claims, as well as for the additionally recited features that further distinguish over the applied prior art. Thus, allowance of these dependent claims is also respectfully requested.

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CONCLUSION

In view of the foregoing remarks, Applicants respectfully request the reconsideration and reexamination of this application and prompt allowance of claims 2, 3, 5-13, 15 and 17-27. Applicants invite the Examiner to contact Applicants' undersigned representative if there are any issues that can be resolved via telephone conference.

Entry of this Amendment is respectfully submitted to be proper insofar as no new matter is presented, no new issues are raised given that the amendments to the claims are merely to place them in independent form, and no additional new claims have been presented.

EXCEPT for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. §1.136(a)(3).

Respectfully submitted,
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